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#include "DHT.h"
#define DHT11Pin 2
#define DHTType DHT11
//OLED
#include <Wire.h>
#include <Adafruit_GFX.h>
#include <Adafruit_SSD1306.h>

DHT HT(DHT11Pin,DHTType);
float humi;
float tempC;
float tempF;

//OLED define
#define SCREEN_WIDTH 128 // OLED display width, in pixels
#define SCREEN_HEIGHT 64 // OLED display height, in pixels
// Declaration for an SSD1306 display connected to I2C (SDA, SCL pins)
Adafruit_SSD1306 display(SCREEN_WIDTH, SCREEN_HEIGHT, &Wire, -1);

void setup() {
  Serial.begin(9600);
  //For DHT11

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HT.begin();
//For OLED I2C
if(!display.begin(SSD1306_SWITCHCAPVCC, 0x3C)) { // Address 0x3D for 128x64
  Serial.println(F("SSD1306 allocation failed"));
  for(;;);
}
display.display(); //Display logo
delay(1000);
display.clearDisplay();
}

void loop() {
  delay(1000);
  humi = HT.readHumidity();
  tempC = HT.readTemperature();
  tempF = HT.readTemperature(true);

  Serial.print("Humidity:");
  Serial.print(humi, 0);
  Serial.print("%");
  Serial.print(" Temperature:");
  Serial.print(tempC, 1);
  Serial.print("C ~ ");
  Serial.print(tempF, 1);
  Serial.println("F");

  display.clearDisplay();
  oledDisplayHeader();

  oledDisplay(3, 5, 28, humi, "%");
  oledDisplay(2, 70, 16, tempC, "C");
  oledDisplay(2, 70, 44, tempF, "F");

  display.display();
}

void oledDisplayHeader(){
  display.setTextSize(1);
  display.setTextColor(WHITE);
  display.setCursor(0, 0);
  display.print("Humidity");
  display.setCursor(60, 0);
  display.print("Temperature");
}

void oledDisplay(int size, int x,int y, float value, String unit){
  int charLen=12;
  int xo=x+charLen*3.2;

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int xunit=x+charLen*3.6;
int xval = x;
display.setTextSize(size);
display.setTextColor(WHITE);

if (unit=="%"){
    display.setCursor(x, y);
    display.print(value,0);
    display.print(unit);
} else {
    if (value>99){
        xval=x;
    } else {
        xval=x+charLen;
    }
    display.setCursor(xval, y);
    display.print(value,0);
    display.drawCircle(xo, y+2, 2, WHITE); // print degree symbols ( )
    display.setCursor(xunit, y);
    display.print(unit);
}
}
```